

REMARKS

Claims 1-15 are pending in the above-identified application. Claims 1-5 and 15 were rejected and claims 6-14 were objected to. With this Amendment, claims 5, 9, and 14 were amended. Accordingly, claims 1-15 remain at issue.

I. Objection To Specification

The Examiner objected to the title of the invention as not descriptive. In response, Applicants have amended the title. Accordingly, Applicants respectfully request withdrawal of this objection.

Applicants have also amended the specification to correct minor typographical errors.

Applicants also submit copies of Figures 8, 11, 13, and 16A-F with red ink markings showing proposed changes thereto for which approval of the Examiner is requested. The changes to the drawings are to correct minor typographical errors and do not constitute new matter. Pursuant to 37 C.F.R. § 1.121(d), Applicants also submit replacement sheets for Figures 8, 11, 13, and 16A-F. Accordingly, Applicants respectfully request withdrawal of this objection.

II. Objection To Claims

Claim 9 was objected to because of an informality. In response, Applicants have amended claim 9 as suggested by the Examiner. Accordingly, Applicants respectfully request withdrawal of this objection.

III. 35 U.S.C. § 112 Indefiniteness Rejection of Claims

Claims 5 and 11-13 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse this rejection.

Applicants have amended claim 5 to clarify the claim. Applicants have made a similar amendment to claim 14. Accordingly, Applicants respectfully request withdrawal of this objection.

IV. 35 U.S.C. § 102 Anticipation Rejection of Claims

Claims 1, 2, and 15 were rejected under 35 U.S.C. § 102(e) as being anticipated by Nagao (U.S. Patent No. 6,373,992). Applicants respectfully traverse this rejection.

Claim 1 is directed to an image processing circuit compressing a dynamic range of an input image. The circuit comprises smoothing processing means smoothing a pixel value of the input image while preserving an edge of the input image, correction coefficient generation means generating a gain correction coefficient according to an output value of said smoothing processing means, and pixel value correction means correcting said pixel value of the input image on a basis of said gain correction coefficient.

Nagao discloses a method and apparatus for image processing. In Nagao, smoothing subsection 26 smooths the original image I_0 to create a smoothed image, I_{AV} . (See col. 8, lines 11-13 and Figure 2.) The smoothed image I_{AV} is subtracted from the sharpness enhanced image data I_S to create a first edge/grain composite image data ΔI_{EG} . (See col. 8, lines 14-17 and Figure 2.) The smoothed image I_{AV} is also added to the second edge/grain composite image data $\Delta I_{EG}'$. (See col. 8, lines 33-36 and Figure 2). Thus, the output of smoothing subsection 26, i.e.,

smoothed image I_{AV} , is either subtracted from or added to another signal. In Nagao, a gain correction coefficient is not generated according to an output value of the smoothing processing means, as required by claim 1. Thus, Nagao neither discloses nor suggests correction coefficient generation means generating a gain correction coefficient according to an output value of said smoothing processing means. Accordingly, claim 1 is allowable over Nagao.

For reasons similar to those discussed above with regard to claim 1, Applicants respectfully submit that claims 2 and 15 are also allowable over Nagao. Accordingly, Applicants respectfully request withdrawal of this rejection.

V. 35 U.S.C. § 103 Obviousness Rejection of Claims

Claims 3-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nagao (U.S. Patent No. 6,373,992). Applicants respectfully traverse this rejection.


As discussed above, Nagao does not disclose or suggest correction coefficient generation means generating a gain correction coefficient according to an output value of said smoothing processing means, as required by claim 2. Thus, it would not have been obvious to one skilled in the art at the time the invention to modify Nagao to derive claims 3-5, which depend from claim 2. Accordingly, Applicants respectfully request withdrawal of this rejection.

VI. Conclusion

In view of the above amendments and remarks, Applicants submit that all claims are clearly allowable over the cited prior art, and respectfully request early and favorable notification to that effect.

Respectfully submitted,

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By: 
Marina N. Saito
Registration No. 09/816,043
SONNENSCHN NATH & ROSENTHAL LLP
P.O. Box 061080
Wacker Drive Station, Sears Tower
Chicago, Illinois 60606-1080
(312) 876-8000